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PATENT APPLICATION
PO-7652
LeA 35,689

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF	
TORSTEN HAGEN ET AL	GROUP NO.: 1771
SERIAL NUMBER: 10/606,399	EXAMINER: R. SERGENT
FILED: JUNE 23, 2003	
TITLE: PROCESS FOR THE PREPARATION OF POLYISOCYANATES OF THE DIPHENYLMETHANE GROUP HAVING A REDUCED COLOR VALUE	

REPLY BRIEF

This Reply Brief is submitted to rebut certain arguments raised by the Examiner in the Examiner's Answer mailed January 30, 2006.

On page 2 of the Examiner's Answer dated January 20, 2006, Section (3), Appellants acknowledge the corrected Status of Claims. In their Appeal Brief, Appellants inadvertently stated that Claim 20 was both rejected and allowed. The Examiner's statement that Claims 8, 18 and 21-24 are allowed is correct.

On page 3, section (9), paragraph 5, lines 5-7 the Examiner stated that:

> "patentees disclose hindered phenols may be used as the reducing agent; and it is noted that the hindered phenol reducing agent also meets appellants' alcohol component".

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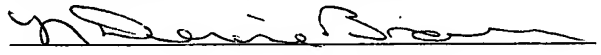
N. Denise Brown, Reg. No. 36,097
Name of applicant, assignee or Registered Representative



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March 24, 2006
Date

It is respectfully submitted by Appellants that, in general, hindered phenols such as those disclosed by the Adkins et al reference are known to be effective antioxidants. A well known antioxidant that is particularly effective is 2,6-di-tert-butyl-4-methylphenol. It is this specific hindered phenol, i.e. 2,6-di-tert-butyl-4-methylphenol, that the Adkins et al reference explicitly discloses as an effective reducing agent for the process therein. See column 2, line 11 of the '971 patent. Appellants respectfully submit that although phenol is technically an alcohol, one of ordinary skill in the art would clearly know and recognize that, phenol and particularly hindered phenols such as 2,6-di-tert-butyl-4-methylphenol which is expressly disclosed by the Adkins et al reference, have properties that are quite different than alcohols. Accordingly, one of ordinary skill in the art could not reasonably expect that alcohols such as required by the present invention and disclosed on page 6, lines 27-32 of the present application would be effective in reducing the color of polyamines and the corresponding polyisocyanates upon reading the Adkins et al reference.

Only after reading the present specification does it become apparent that alcohols are effective in reducing the color of polyamines and the corresponding polyisocyanates. Such a perspective does not, however, provide a proper basis for a rejection under 35 U.S.C. § 103(a).

On page 4, lines 10-11 of the Office Action, the Examiner has criticized Appellants as they have:

> "not provided any showings demonstrating criticality attributable to when the alcohol is added."

Appellants do not believe they are required to show criticality of when the alcohol is added since the Adkins et al reference does not fairly suggest to one of ordinary skill in the art that an alcohol is effective in reducing the color of polyamines or the corresponding polyisocyanates.

The Examiner has further stated on page 4, second paragraph, lines 5-6 that

> "these arguments are immaterial since appellants' claims do not exclude the argued reducing agent."

It is respectfully submitted that the reference relied on by the Examiner does not disclose or suggest that alcohols as required by the presently claimed invention are effective in reducing the color of polyamines and/or the corresponding polyisocyanates. The Adkins et al reference discloses that reducing agents (not alcohols) are effective to reduce the color of these compounds.

Also, on page 4, lines 8-10, the Examiner stated that:

> "appellants' discussion of the examples of Adkins et al. is not well taken, in that it is not seen that the examples are particularly relevant. Firstly, the examples utilize a reducing agent; therefore, they are immaterial in establishing the sole effect of an alcohol on color reduction.

Appellants' respectfully submit that the Examiner expressly states that the examples of the Adkins et al reference are not "particularly relevant". The Examiner then admits, however, that none of the examples of the reference demonstrate the effect of an alcohol on color reduction. The last sentence by the Examiner clearly supports Appellants' position that the Adkins et al reference is immaterial to whether it is obvious to one of ordinary skill in the art to reduce the color of polyamines and/or the corresponding polyisocyanates by the addition of an alcohol. Accordingly, it is respectfully submitted that the Adkins et al reference does not provide a proper basis for a rejection of the present invention under 35 U.S.C. § 103(a) .

Finally, the Examiner stated on page 5, lines 4-6 that:

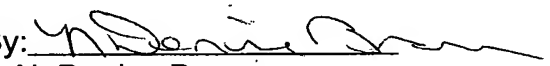
> "appellants' arguments with respect to claims 10 and 20 are not well taken; the reference clearly discloses the methanol species of the claims as a preferred alcohol quenching agent."

Appellants have not stated that the Adkins et al reference does not disclose methanol as a preferred alcohol quenching agent. With regard to Claims 10 and 20, Appellants' position is that the Adkins et al reference does not disclose or suggest that the alcohols required by Claims 10 and 20 of the present application, are or can be effective in reducing the color of polyamines and/or the corresponding polyisocyanates. Upon reading the Adkins et al reference, one of ordinary skill in

the art has no insight into the fact that the addition of methanol, ethanol, n-propanol, isopropanol, monoethanolamine, N-substituted derivatives of monoethanolamine, diethanolamine, N-substituted derivatives of diethanolamine, triethanolamine or a mixture of these compounds would reduce the color of polyamines and/or the corresponding polyisocyanates. This is simply not suggested by this reference.

In view of the above, Appellants respectfully submit that the rejection under 35 U.S.C. § 103(a) of Claims 1, 9, 11 and 19 over the Adkins et al reference, and that the rejection under 35 U.S.C. § 103(a) of Claims 10 and 20 over the Adkins et al reference is improper. The allowance of Claims 1, 9, 11 and 19, and of Claims 10 and 20 is respectfully requested.

Respectfully submitted,

By: 
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